System and Method for Fabricating a Three-Dimensional Metal Object Using Solid Free-Form Fabrication

ABSTRACT

A method for solid free-form fabrication of a three-dimensional metal object includes depositing a particulate blend in a defined region, the particulate blend including a number of metal or metal alloy particulates and a peroxide, and selectively ink-jetting a binder system onto a predetermined area of the particulate blend to form a green part, wherein the liquid phase binder includes a water soluble monofunctional acrylate-based monomer, a water soluble difunctional acrylate-based monomer, an amine, and water.